IN THE CLAIMS:

1. - 31. cancelled

32. (currently amended) A method for processing a session in a packet-processing system, the session having a session rate, the method comprising the steps of:

determining whether the session rate matches one of a plurality of basic rates, which with each basic rate associated with a respective one of a plurality of rate-specific queues; and

splitting the session, in response to a non-match of the session rate with any of the basic rates, into subsessions for queuing into at least one of the rate-specific queues, wherein the rate is selected and the session is split such that every subsession is restricted to have has an identical subsession rate.

33. - 34. cancelled

- 35. (previously presented) The method of claim 32, wherein the subsession rate matches one of the plurality of basic rates.
- 36. (original) The method of claim 35, further comprising the step of: queuing the subsessions into a corresponding rate-specific queue having an associated basic rate matching the subsession rate.
- 37. (original) The method of claim 32, wherein the steps of determining and splitting are performed by a queue controller.
- 38. (original) The method of claim 32, further comprising the step of: processing the session and subsessions using a per-connection-timestamp procedure.
 - 39. (original) The method of claim 32, further comprising the step of:

processing the session and subsessions using a no-per-connection-timestamp procedure.

40. (original) The method of claim 32, wherein the rate-specific queues are rate first-in-first-out (FIFO) queues.

41. - 51. cancelled